<u>REMARKS</u>

Claims 21-38 are pending. Claims 21, 26, and 34 are the only independent claims. Claims 22, 28, and 34-38 have been canceled by this response. Claims 21 and 26 have been amended to more distinctly claim the subject matter therein. Applicants submit that no new matter has been added by this response.

<u>IN THE SPECIFICATION</u>

Applicant respectfully request correction to the response to Office action filed February 11, 2008. In a telephone conference with the Examiner on June 30, 2008, it was noted that in the February 11th amendments made to the specification, the paragraph reference numerals were incorrectly identified as [0028], [0030], [0031], [0032], [0033], [0034], [0035], [0036], [0037], [0040], [0041], [0043], [0046], [0047], [0048], [0049] and [0050], respectively for the paragraph amendments beginning on page 2 of the specification. The previously amended paragraph reference numerals should be correctly identified as [0027], [0029], [0030], [0031], [0032], [0033], [0034], [0035], [0036], [0039], [0040], [0042], [0045], [0046], [0047], [0048], [0049], respectively for the paragraph amendments beginning on page 2 of the specification filed on February 11, 2008. The paragraph corrections are as follows:

Please replace paragraph [0027] with the following amended paragraph:

[0027] A UPnP-based media contents playback (reproducing) system which can rapidly continuously play media contents (for example, audio and video contents) played by a first control point <u>110</u> by a second control

point 112 by transmitting state information of the media contents played by the first control point to the second control point, and a method thereof in accordance with the preferred embodiments of the present invention will now be described in detail with reference to FIGS. 1 to 11. That is, when the user watching the media contents in one space intends to move to another space and watch the media contents, the first control point 110 stores the state information of the media contents (state information of a media renderer 148) in a media server 120, and the second control point 112 located in another space reads the state information stored in the media server and plays the corresponding media contents, so that the user can rapidly continuously watch the media contents in another space without taking an additional time for recomposing UPnP devices in another space.

Please replace paragraph [0029] with the following amended paragraph:

[0029] A first control point CP1 110 selects predetermined media contents among the media contents provided by a media server MS 120, and confirms whether a first media renderer MR1 148 can play the selected media contents. Here, the first control point CP1 110 matches protocols and data formats between the media server MS 120 and the first media renderer MR1 148, sets an AudioNideo Transport Uniformed Resource Identifier (AV Transport URI) through the media server MS or the first media renderer MR1, and invokes a play action. That is, when the media contents stream is transmitted from the media server MS 120 to the first media renderer MR1 148, the first control point CP1 110 plays the corresponding media contents by the first media renderer MR1, so that the user can watch the media contents.

Please replace paragraph [0030] with the following amended paragraph:

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[0030] On the other hand, when the user pauses playback of the media contents to move to another space (for example, from first to second floor), the first control point CP1 110 pauses the media server MS 120 and the first media renderer MR1 148, and stores state information of the first media renderer MR1 (rendering state information) in the media server MS. That is, the first control point CP1 110 receives state information of an AV Transport service and a Rendering Control service of the first media renderer MR1 148 from the first media renderer MR1, and stores the received state information in the media server MS 120. Here, the AV Transport service and the Rendering Control service are defined by the UPnP.

Please replace paragraph [0031] with the following amended paragraph:

[0031] Thereafter, when the user moves to another space (for example, from first to second floor), a second control point CP2 112 located in another space receives the state information stored in the media server MS 120 through the UPnP-based home network upon the user's request. That is, the media server MS 120 transmits the stored state information to the second control point CP2 112 according to the control signal from the first control point CP1 110.

Please replace paragraph [0032] with the following amended paragraph:

[0032] The second control point CP2 112 transmits the state information to a second media renderer MR2 150. That is, the second control point CP2 112 transmits the state information of the AV Transport service and the Rendering Control service of the first media renderer MR1 148 to the second media renderer MR2 150, so that the user can rapidly continuously watch the media contents which he/she previously watched

in another space (for example, second floor).

Please replace paragraph [0033] with the following amended paragraph:

[0033] On the other hand, in order for the first control point CP1 110 to transmit the state information to the second control point CP2 112 through the media server MS, the first control point CP1 and the second control point CP2 must be able to discover and control each other. However, it is difficult for the first control point CP1 110 and the second control point CP2 112 to discover and control each other. Accordingly, in order to transmit the state information received by the first control point CP1 110 to the second control point CP2 112, the state information is preferably transmitted through the service of the UPnP device. For example, preferably, the first control point CP1 110 transmits the state information stored in the media server MS to the second control point CP2 112 through a Connection Manager service of the media server MS 120.

Please replace paragraph [0034] with the following amended paragraph:

[0034] Preferably, an optional action for transmitting the state information stored in the media server MS 120 to the second control point CP2 112 through the Connection Manager service of the media server MS is added and temporarily stored in the media server MS. For example, the name of the optional action can be CM::StatePut( ), and input arguments can be objectId, MediaServer State information and MediaRenderer State information. The objectID is necessary as an identifier for the stored state information.

Please replace paragraph [0035] with the following amended paragraph:

[0035] Therefore, when the user intends to search the media server MS by using the second control point CP2 112 located in another space and watch the media contents which he/she previously watched, the user can watch the media contents from the paused part or the beginning on the basis of the state information corresponding to the objectID, namely, the state information of the media contents. For example, when the user intends to watch the media contents on the basis of the stored state information, the second control point CP2 112 receives the state information stored ~~stbred~~ in the media server MS through CM:StateGet action (refer to FIG. 4). Here, the received state information includes state information relating to the AV Transport Control service of the first media renderer MR1 148 and state information relating to the Rendering control service thereof.

Please replace paragraph [0036] with the following amended paragraph:

[0036] In accordance with the present invention, the media contents playback method of the UPnP-based media contents playback system can be varied according to a pull model and a push model. The process of the user watching the media contents before moving from one to another space is identical to that in the general UPnP standard, and thus explanations thereof are omitted. The operation for transmitting the state information stored in the media server MS to the second control point CP2 112 will now be explained.

Please replace paragraph [0039] with the following amended paragraph:

[0039] When the model of the UPnP-based media contents playback system is the pull model and the second control point CP2 112 transmits the state information stored in the media server MS 220 to the second media renderer MR2 250, the second media renderer MR2 can change a

media offset of the buffered media contents on the basis of time information of the media server MS, or play the media contents again from the last pause time through seek( ) action.

Please replace paragraph [0040] with the following amended paragraph:

[0040] On the other hand, when the model of the UPnP-based media contents playback system is the push model, the media server 220 executes the AV Transport service ~~Transpor tservice~~, and the media renderer MR148 executes the Rendering Control service. Therefore, the UPnP-based media contents playback system obtains the state information and plays the corresponding media contents on the basis of the state information as shown in FIG. 3.

Please replace paragraph [0042] with the following amended paragraph:

[0042] When the model of the UPnP-based media contents playback system is the push model and the second control point CP2 112 transmits the state information stored in the media server MS 320 to the second media renderer MR2 350, the second media renderer MR2 can change a media offset on the basis of time information of the media server MS, or play the media contents from the last pause time through seek( ) action.

Please replace paragraph [0045] with the following amended paragraph:

[0045] In order to transmit ~~trahsmit~~ the state information received by the first control point [[CP]] CP1 110 to the second control point CP2 112, CM:StateGet( ) action and CM::StatePut( ) action can be added as shown in FIGS. 4 to 6.

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Please replace paragraph [0046] with the following amended paragraph:

[0046] So as to transmit the media contents stream from the media server MS to the second media renderer MR2 150 by invoking each action once in every service, AVT::StateGet( ), AVT::StateSet at RCS::StateGet( ) and AVT::StateSet( ) actions can be added as shown in FIGS. 7 to 11.

Please replace paragraph [0047] with the following amended paragraph:

[0047] On the other hand, in a state where the first control point CP1 110 does not pause the operation of the first media renderer MR1 148, the users can watch the media contents by the second media renderer MR2 150, which is called a coping renderer. For example, when the two users watch the same media contents (for example, movie program) together, if one of the users intends to move to another space and watch the same media contents in another space, the first control point CP1 invokes StateSet action from the media server MS 120, and the second media renderer MR2 150 located in another space receives the state information through StateGet action, so that the user can continuously watch the media contents by the second media renderer MR2 on the basis of state information. For reference, the control point located in another space (for example, second control point) can be informed of all state information of the first media renderer MR1 148 by joining the event service, and thus may not use CM:StateSet( ) and CM::StateGet( ) services.

Please replace paragraph [0048] with the following amended paragraph:

[0048] In addition, the second media renderer MR2 150 located in another space is a combo media renderer (integration module of control point and media renderer), which can receive the state information by joining the event services of the media server MS 120 and the first media renderer

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MR1 148, instead of invoking CM:StateGet( ) action. Here, when a type of the media contents is a file, the user can easily watch the file-type media contents on the basis of the location information of the media contents which he/she previously watched.

Please replace paragraph [0049] with the following amended paragraph:

[0049] In accordance with the present invention, when the media server MS 120 transmits the media contents to the second media renderer MR2 150 located in another space through a multicast, the second media renderer MR2 can play the media contents transmitted through the multicast.

The above amendments to the specification are a re-listing of the amendments included in the February 11, 2008 response and are included only to correctly identify the paragraph numbers.

REJECTIONS UNDER 35 U.S.C. § 112

Claims 21-26, 28-29, 34-36 and 38 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner asserts that the claims contain subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time of the application was filed, had possession of the claimed invention.

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Specifically, the Examiner asserts the following additional limitations were not supported by the original specification: "a single local network" in claims 21, 26, and 34; and "at least two services" in claims 21, 22, 23, 25, 26, 28, 29, 35, 36, and 38.

Claims 22, 28, 34-36, and 38 have been canceled by this response. Therefore, the rejections under 35 U.S.C. §112 are moot with respect to claims 22, 28, 34-36, and 38 and it is respectfully requested that the rejections be withdrawn.

In regards to the limitation "a single local network", the term "single" has been deleted from the identified limitation in claims 21 and 26. Applicants respectfully submit that support for a local network is supported by the original specification.

In regards to the limitation "at least two services", Applicants respectfully submit that support for "receiving of state information from at least two services" is found in the specification paragraph [0030] and FIGS. 2 and 3.

Paragraph [0031] includes "[t]hat is, the first control point CP1 110 receives state information of an AV Transport service and a Rendering Control service of the first media renderer MR1 148 from the first media renderer MR1, and stores the received state information in the media server MS 120," which describes receipt of state information from two services. The two services are (1) the AV Transport service, and (2) the Rendering Control service.

Additionally, FIG. 2 shows Control Point 210 receipts of state information from two different services, that is "AVT::StateGet()" and "RCS::StateGet()." FIG. 3 shows that the Control Point invokes actions "StateGet()" to a service AVT of the media server

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320 and another service RCS of the media renderer 148, respectively, to receive state information from those two services. Clearly, the specification supports the limitation "at least two services" as recited in claims 21, 22, 23, 25, 26, 28, and 29.

Applicants respectfully request that the rejections under 35 U.S.C. §112, first paragraph be withdrawn.

REJECTIONS UNDER 35 U.S.C. § 103

Claims 21-38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent Publication No.: 2003/0046338, to Runkis (hereinafter as "Runkis") in view of US Patent 5,751,338 to Ludwig, Jr. (hereinafter as "Ludwig"). Applicants respectfully traverse these rejections, and request reconsideration and allowance of these claims in view of the following arguments.

Claims 22, 28, and 34-38 have been canceled by this response. Therefore, the rejections under 35 U.S.C. §103 are moot with respect to claims 22, 28, and 34-38 and it is respectfully requested that the rejection be withdrawn.

Amended independent claim 21 is directed to a method for delivering content playback related information between devices on a local network, and includes "obtaining, when a particular operation for a content being played is requested, state information from at least two services involved in the playback of the content, the state information comprising information related to data transport control of the content and information related to rendering states in which data of the content is rendered."

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Applicants respectfully submit that support for the amendments to claim 21 may be found in the specification paragraph [0035], which recites in part, "[h]ere, the received state information includes state information relating to the AV *Transport Control service* of the first media renderer MR1 and state information relating to the *Rendering control service* thereof", and the last sentence at the paragraph [0038] of the specification, which reads "[f]or example, when a volume value of the Rendering Control service is not a basic value, the control point 210 invokes the corresponding action and adjusts the volume value."

Applicants respectfully submit that the cited reference fails to teach or suggest all of the limitations of independent claim 21.

Runkis discloses a system and method which employs a globally distributed computer network populated by a plurality of programmable autonomous network objects (PANOs) to facilitate the storage and delivery of digital information, and services. On page 5 of the Office Action, the Examiner cites Runkis, Page 7, paragraph [0078] in asserting that "the state information includes information related to rendering states in which content data is rendered," that is "the rendering state being captured for the restart of rendering at another location."

Applicants respectfully submit that the Runkis fails to teach "state information from at least two services involved in the playback of the content, the state information comprising information related to data transport control of the content and information related to rendering states in which data of the content is rendered," as recited in independent claim 21.

In regards to the limitation "information related to data transport control of the content," the Examiner relies on Runkis paragraph [0078], to discloses resuming playback from previously-stopped position, which infers that the playing position is stored when the content stops playing. However, Runkis fails to teach the identified limitation of independent claim 21 because the data transport control is to conduct control relating to start, stop, and pause of a content that is streamed between two separated devices. In other words, the cited paragraph [0078] of Runkis fails to disclose obtaining and storing of "the information related to rendering states in which data of the content is rendered." In contrast, the rendering states are related to presentation states, for example, volume and brightness, not just the content playing position.

On page 4 of the Office Action, the Examiner cites paragraph [0039] as disclosing the limitation "obtaining state information from at least two services." The Examiner asserts that the services may include audio, video and games, at least two of which contain content to be transported and rendered. However, the cited reference clearly teaches delivery of content itself, not "information related to data transport control of the content." The delivery of content itself, i.e. audio, video and games is obviously different from "state information", as recited in independent claim 21. More to the point, state information is not a content, but is information regarding playing and rendering of a content.

Another distinction of amended, independent claim 21, is that Runkis fails to teach "obtaining, when a particular operation for a content being played is requested, state information from at least two services involved in the playback of the content".

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Specifically, Runkis fails to disclose obtaining state information of a content from services involved in playback of the content, when a particular operation for the content being played is requested. The amended limitations of claim 21 are supported by the specification paragraph [0030].

Furthermore, Runkis fails to teach "invoking an action to a device to store the state information in the device, wherein the state information is included in the action as an input argument." In review of the Runkis reference, paragraph [0078] implies that a play position of the content is stored to be used later. However, Runkis fails to teach that the rendering state, i.e. volume, brightness, etc., in which the content is presented is stored to be used later.

On page 5 of the Office Action, the Examiner relies on Ludwig to cure the deficiencies of Runkis. Ludwig is directed to methods and system for providing multimedia telecommunication services to multimedia workstations communicating with a multimedia central office. Applicants respectfully submit that Ludwig fails to cure the deficiencies of Runkis with respect to "obtaining, when a particular operation for a content being played is requested, state information from at least two services involved in the playback of the content, the state information including information related to data transport control of the content and information related to rendering states in which data of the content is rendered" and "invoking an action to a device to store the state information in the device, wherein the state information is included in the action as an input argument."

Therefore, for the above reasons Applicants submit that independent claim 21 is patentable over the cited combination of references. Independent claim 26 has been amended to include limitation similar to independent claim 21. Therefore, independent claim 26 is believed to be patentable over the cited combination of references. Accordingly, dependent claims 23-25, 27, and 29-33 are believed to be allowable at least by virtue of their respective dependence from independent claims 21 and 26.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application and the claims are in condition for reconsideration on the merits, thus reexamination of the application is requested. The Examiner is invited to call the undersigned attorney at (213) 623-2221 should the Examiner believe a telephone interview would advance the prosecution of the application.

Respectfully submitted,

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